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| 10/590,309  | 10/12/2006  | Yuichi Ohkawara      | 2006_1287A          | 8154             |
| 513 7590 02/25/2011<br>WENDEROTH, LIND & PONACK, L.L.P.<br>1030 15th Street, N.W.,<br>Suite 400 East<br>Washington, DC 20005-1503 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| BROWN, COURTNEY A   |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 1617  |             |                      |                     |                  |
| NOTIFICATION DATE   |             | DELIVERY MODE        |                     |                  |
| 02/25/2011  |             | ELECTRONIC           |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ddalecki@wenderoth.com  
coa@wenderoth.com

**Office Action Summary****Application No.**

10/590,309

**Applicant(s)**

OHKAWARA, YUICHI

**Examiner**

COURTNEY BROWN

**Art Unit**

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 7-10, 12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-040)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date 1/28/11 and 10/20/10
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Acknowledgement of Receipt/Status of Claims***

In the Office Action of August 5, 2010, the Examiner indicated that clothianidin is the compound of formula [II] of the present application wherein  $A+B=1,3,5$ -oxadiazine. However, Applicant has pointed out that clothianidin is not a compound of formula [II], wherein  $A+B=1,3,5$ -oxadiazine. Thiamethoxam is a compound of formula [II], wherein  $A+B=1,3,5$ -oxadiazine. As a result, claim 7 is withdrawn from further consideration, because it does not read on the elected species.

This Office Action is in response to the amendment filed January 5, 2011. Claims 1-13 are pending in the application. Claims 1-7 and 11 have been amended. Claims 7-10, 12 and 13 have been withdrawn as being directed to a non-elected invention. Claims **1-6 and 11** are being examined for patentability.

### ***Withdrawn Rejections***

Applicant's amendments and arguments filed January 5, 2011 are acknowledged and have been fully considered.

The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application. The rejection of claims 1,2,6, 7 and 11 rejected under 35 U.S.C. 112, second paragraph has been withdrawn in view of Applicant's amendment.

The statutory type (35 U.S.C. 101) double patenting rejection of claims 1-7 and 11 over claims 1-7 and 11 of copending application 12788679 is also withdrawn in view of Applicant's amendment.

***Examiner's Response to Applicant's Remarks***

Applicant's arguments, filed January 5, 2011 with respect to the rejection of claims 1,2,6, 7 and 11 under 35 U.S.C. 112, second paragraph as well as the statutory type (35 U.S.C. 101) double patenting rejection of claims 1-7 and 11 have been considered but are moot in view of Applicant's amendment.

***Maintained Rejections***

Applicant's arguments filed January 5, 2011 are acknowledged and have been fully considered.

The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application. The rejection of claims 1-6 and 11 under 35 U.S.C. 103(a) as being unpatentable over Berger et al. (US Patent 7,696,232 B2) **is maintained**.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

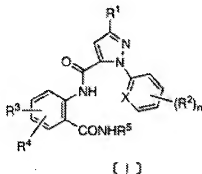
The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

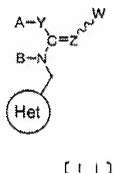
**Claims 1-6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger et al. (US Patent 7,696,232 B2).**

### ***Applicant's Invention***

Applicant claims an insecticide composition which comprises one or not less than two kinds of compounds being selected from a compound represented by the formula[I]:



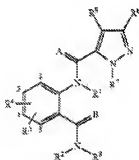
wherein R1, R2, R3 and R4 are the same or different, and each represent a hydrogen atom, a C1-6 alkyl group, a C1-6 haloalkyl group or a halogen atom; R5 is a hydrogen atom or a C1-6 alkyl group; X is CH or N; n is 0 to 3, or a salt thereof, and a neonicotinoid compound represented by the formula [II]:



***Determination of the scope and the content of the prior art  
(MPEP 2141.01)***

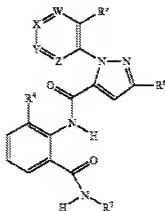
Berger et al. teach methods for protecting a propagule or a plant grown therefrom from invertebrate pests comprising contacting the propagule or the locus of the propagule with a biologically effective amount of a compound of Formula I (see below), its N-oxide or an agriculturally suitable salt thereof (abstract). Berger et al. teach that their invention relates to **the control of phytophagous invertebrate pests** such as arthropod pests by contacting plant propagules or the locus of the propagules with certain anthranilamides as well as propagule-coating compositions comprising said anthranilamides (column 1, lines 10-17). Berger et al.

teach the compound of instant formula I (compound of formula I of Berger et al. shown below wherein :R8=H; R7= a hetroaromatic ring (X=N of instant application); R1,R4,R5, and R6= H, C1-C6 alkyl group, a C1-C6 haloalkyl group or a halogen atom; R2 and R3=H or C1-C6 alkyl; A=O and B=O (see claim 1 of Berger et al.).



Compound of formula I of Berger et al.

Berger et al. teach the use of the compound of instant formula I and at least one additional biologically active compound or agent such as **clothianidin** , **imidacloprid**, **thiacloprid**, **thiamethoxam**(compound of formula II of instant application wherein A+B= 1,3,5 oxadiazine) , **acetamiprid**.( neonicotinoid compound of instant application, see claims 5 and 7 of Berger et al.). Specifically, Berger et al. teach the compound below (see table 2 of column 59 of Berger et al.) wherein **W, X and Y=CH; Z=N; R3=an isopropyl group; R4=methyl and R6 and R9= chlorine** (compound IA of instant application as disclosed in instant claim 4).



For growing-medium drenches, Berger et al. teach that the formulation needs to provide the Formula I compound, generally after dilution with water, in solution or as particles small enough to remain dispersed in the liquid. Berger et al. teach that water-dispersible or soluble powders, granules, tablets, emulsifiable concentrates, aqueous suspension concentrates and the like are formulations suitable for **aqueous drenches of growing media**. Berger et al. teach that the drench liquid comprising the Formula I compound can be added to a liquid growing medium (i.e. hydroponics), which causes the Formula I compound to become part of the liquid growing medium (column 84, lines 53-66).

***Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)***

The difference between the invention of the instant application and that of Berger et al. is that Berger et al. do not expressly teach an example of a composition comprising the compounds is instant formula I and II.



***Finding of prima facie obviousness***

***Rationale and Motivation (MPEP 2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Berger et al. to arrive at a composition comprising the compounds of instant formulas I and II for the use of controlling an insect pest. Berger et al. suggest the use of the compounds of instant formulas I and II for the control of phytophagous invertebrate pests such as arthropod pests. One would have been motivated to use the teaching of Berger et al. because all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Thus, in view of *In re Kerkhoven*, 205 USPQ 1069 (C.C.P.A. 1980), it is *prima facie* obvious to combine two or more compositions each of which is taught by prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose. The idea of combining them flows logically from their having been individually taught in prior art.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed

invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

### **Response to Arguments**

Applicant's arguments filed on January 5, 2011, with respect to the rejection of claims 1-6 and 11 under 35 U.S.C. 103(a) as being unpatentable over Berger et al. (US Patent 7,696,232 B2) have been fully considered but they are not persuasive.

Applicant argues that the insecticide composition of claim 1 comprises at least one compound represented by compounds of formula [I] and a compound represented by the formula [II] and that the Berger et al. reference enumerates a number of compounds or medicaments which can be used together with a compound of formula [I] (see column 82, line 27 to column 83, line 36) which are various and diverse, and there is no reason or rationale to select and combine the compounds disclosed in the reference to arrive at the presently claimed composition. Thus, Applicant concludes that an insecticide composition comprising the combination of a compound represented by the formula [I] and a compound represented by the formula [II] would not have been obvious from the teachings of the Berger et al. reference, which enumerates various and diverse examples. However, the Examiner disagrees with Applicant's argument because Berger et al. teach the preferred use of the compound of instant formula I in combination with the neonicotinoid class of insecticides (see column 83, lines 45-48 and claims 1,3,5 and 6 of Berger et al.). Thus, an insecticide composition comprising the

combination of a compound represented by the formula [I] and a compound represented by the formula [II] would have been obvious from the teaching of the Berger et al. reference.

Furthermore, Applicant argues that the claimed composition provides superior and unexpected results over the art because of a synergistic effect of the combination of both a compound of formula [I] and a compound of formula [II]. Thus, Applicant concludes that the claimed composition exerts excellent insecticidal effects that cannot be obtained when each of the compounds in the claimed composition is used alone. Applicant points to Test Example 2 of the specification, a compound represented by the formula [II] (i.e., thiamethoxam) alone in a composition shows no insecticidal activity of *Spodoptera litura* at an application concentration of 0.007 ppm, and a compound represented by the formula [I] (i.e., compound (I-I)) alone in a composition shows a 55% death rate of *Spodoptera litura* at an application concentration of 0.007 ppm (see Table 2 and page 40, lines 7-11 of the specification). In spite of these results, Applicant argues that the claimed composition comprising a compound represented by the formula [I] and a compound represented by the formula [II] shows an 80% death rate of *Spodoptera litura* at the same application concentration (i.e., thiamethoxam: 0.007 ppm and compound (I-I): 0.007 ppm) (see Table 2 and page 40, lines 7-11 of the specification). Applicant further argues that it is clear from Test Example 5 of the specification, a compound represented by the formula [III] (thiamethoxam) alone shows a 10% death rate of *Plutella xylostella* at an application concentration of 0.0064 ppm, and a compound represented by the formula [I] (compound (1-4)) alone shows a 15%

death rate of *Plutella xylostella* at an application concentration of 0.0064 ppm (see Table 8 and page 45, lines 5-20 of the specification). In spite of these results, Applicant argues that the claimed composition comprising a compound represented by the formula [I] (compound (I-4)) and a compound represented by the formula [II] (thiamethoxam) shows a 50% death rate of *Plutella xylostella* at the same application concentration (i.e., thiamethoxam: 0.0064 ppm and compound (I-4): 0.0064 ppm) (see Table 8 and page 46, lines 7-11 of the specification). The Examiner agrees that the composition comprising both a compound represented by formula [I-1] and or [I-4] in combination with thiamethoxam exerts superior and unexpected synergistic insecticidal activity. However, the claimed genus of the compound of instant formula I is broad and the provided evidence (wherein only compounds formula [I-1] and or [I-4] were used) is not commensurate in scope with this broadly claimed genus.

**New Rejection(s) Necessitated by the Amendment filed on January 5, 2011**

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated

by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6 and 11 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 and 11 of copending Application No. 12788679. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced co-pending application 12788679.

The copending application recites the same insecticide composition comprises the compound of instant formula I and a neonicotinoid compound. The difference between the invention of the instant application and that of co-pending application 12788679 is that instant claims comprise a subgenus of the neonicotinoid compound found in co-pending application 12788679. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to select any of the species of the genus disclosed by co-pending application 12788679, including those instantly claimed, because the skilled chemist would have the reasonable expectation that any of the species of the genus would have similar properties, and thus, the same use as taught for the genus as a whole. One of ordinary skill in the art would have been

motivated to select the claimed compounds from the genus co-pending application 10/590309 since such compounds would have been suggested by co-pending application 10/590309 as a whole. A disclosed genus of useful compounds is sufficient to render prima facie obvious a species falling within a genus. Further, both compounds of instant formula II in the instant and copending application are from the neonicotinoid class of insecticides. Therefore, it would have been obvious to substitute one neonicotinoid compound for another neoinicotinoid compound with the expectation of success. Thus, the instant claims are obvious. From this extensive overlap of subject matter, one of ordinary skill in the art would recognize that the same product is taught in copending application 12788679.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Conclusion***

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney A. Brown whose telephone number is 571-270-3284. The examiner can normally be reached on 9:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fereydoun Sajjadi can be reached on 571-272-3311. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Courtney A. Brown  
Patent Examiner  
Technology Center 1600  
Group Art Unit 1617  
/Janet L. Epps-Smith/  
Primary Examiner, Art Unit 1633